

Santa Cruz Map being drafted

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
STREAM MONITORING DATA								
Alum Gulch headwaters - 31E28'20"/110E43'51" AZ15050301-561A A&We, PBC, AgL	ADEQ TMDL Program Below Trench Camp Mine SCALG005.90	1999 - 1 partial suite	pH SU	6.5 - 9.0 (A&We, PBC, AgL)	5.9	1 of 1		
			Zinc (dissolved) µg/L	varies by hardness (A&We)	2500	1 of 1		
	ADEQ TMDL Program Below January adit, Above Humboldt Canyon SCALG005.58	1999 - 1 partial suite 2000 - 1 partial suite	Cadmium (total) µg/L	84 (FC)	140 - 180	2 of 2		
				50 (AgL)		2 of 2		
			Copper (dissolved) µg/L	varies by hardness (A&We)	110 - 400	2 of 2		
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	4.5 - 5.3	2 of 2		
			Zinc (dissolved) µg/L	varies by hardness (A&We)	39,000 - 56,000	2 of 2		
			Zinc (total) µg/L	25,000 (AgL)	42,000 - 56,000	2 of 2		
	ADEQ TMDL Program Below Humboldt Canyon, Above Alum Falls SCALG005.30	1999 - 1 partial suite	Cadmium (total) µg/L	84 (FC)	180	1 of 1		
				50 (AgL)		1 of 1		
			Copper (dissolved) µg/L	varies by hardness (A&We)	1200	1 of 1		
			Copper (total) µg/L	500 (AgL)	1200	1 of 1		
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	3.6	1 of 1		
			Zinc (dissolved) µg/L	varies by hardness (A&We)	44,000	1 of 1		
			Zinc (total) µg/L	25,000 (AgL)	41,000	1 of 1		

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STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1999 - 2000	Cadmium (total) µg/L	84 (FC)	10 - 180	3 of 4	Inconclusive (Not attaining)	ADEQ collected 4 samples at 3 sites in 1999-2000. TMDLs for cadmium, copper, zinc and pH were approved by EPA in 2003. Assessed as "not attaining" due to copper, cadmium and zinc exceedances, and low pH. Although current data for cadmium and pH are "inconclusive," this reach will remain "not attaining" until data indicate that all uses are attaining for parameters addressed in the TMDL. Place on the Planning List for TMDL follow-up monitoring and missing core parameter: total lead.
	A&We Not attaining PBC Not attaining AgL Not attaining	4 samples 2 sampling events		50 (AgL)		3 of 4	Inconclusive (Not attaining)	
			Copper (dissolved) µg/L	varies by hardness (A&We)	13 - 1200	3 of 4 samples 2 of 2 events (in 1999 and 2000)	Not attaining	
			Copper (total) µg/L	500 (AgL)	63 - 1200	1 of 4	Inconclusive (Not attaining)	
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	3.6 - 5.9	4 of 4	Inconclusive (Not attaining)	
			Zinc (dissolved) µg/L	varies by hardness (A&We)	2500 - 56,000	4 of 4 samples 2 of 2 events (in 1999 and 2000)	Not attaining	
			Zinc (total) µg/L	25,000 (AgL)	2900 - 56,000	3 of 4	Inconclusive (Not attaining)	
Alum Gulch 31E28'20"/110E43'51" - 31E29'17"/110E44'25" AZ15050301-561B A&Ww, FC, FBC, AgL	ADEQ TMDL Program Below Alum Falls, Above World's Fair Mine SCALG004.98	1999 - 1 partial suite	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	160	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
			Cadmium (total) µg/L	84 (FC)	160	1 of 1		
				50 (AgL)		1 of 1		
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	1500	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
			Copper (total) µg/L	1300 (FBC)	1400	1 of 1		
				500 (AgL)		1 of 1		

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
			pH SU	6.5 - 9.0 (A&Ww, FBC, AgL)	3.5	1 of 1		
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	46,000	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
			Zinc (total) µg/L	25,000 (AgL)	49,000	1 of 1		
	ADEQ TMDL Program Below World's Fair Mine SCALG004.82	1998 - 3 partial suites	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	28 - 194	3 of 3		
				varies by hardness (A&Ww chronic)		3 of 3		
			Cadmium (total) µg/L	84 (FC)	27 - 174	1 of 3		
				50 (AgL)		1 of 3		
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	881 - 2110	3 of 3		
				varies by hardness (A&Ww chronic)		3 of 3		
			Copper (total) µg/L	1300 (FBC)	799 - 2140	1 of 3		
				500 (AgL)		3 of 3		
			pH SU	6.5 - 9.0 (A&Ww, FBC, AgL)	3.3 - 3.7	3 of 3		
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	6110 - 56,200	3 of 3		
				varies by hardness (A&Ww chronic)		3 of 3		
			Zinc (total) µg/L	25,000 (AgL)	5730 - 50,600	1 of 3		
	ADEQ TMDL Program 200 meters below World's Fair Mine SCALG004.61	1999 - 1 partial suite 2000 - 1 partial suite	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	170 - 220	2 of 2		
				varies by hardness (A&Ww chronic)		2 of 2		

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
			Cadmium (total) µg/L	84 (FC)	170 - 290	2 of 2		
				50 (AgL)		2 of 2		
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	1600 - 2000	2 of 2		
				varies by hardness (A&Ww chronic)		2 of 2		
			Copper (total) µg/L	1300 (FBC)	1900 - 2100	2 of 2		
				500 (AgL)		2 of 2		
			pH SU	6.5 - 9.0 (A&Ww, FBC, AgL)	3.2	2 of 2		
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	49,000 - 53,000	2 of 2		
				varies by hardness (A&Ww chronic)		2 of 2		
			Zinc (total) µg/L	25,000 (AgL)	45,000 - 54,000	2 of 2		
	Summary Row A&Ww Not attaining FC Not attaining FBC Not attaining AgL Not attaining	1998 - 2000 6 samples 5 sampling events	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	28 - 220	5 of 5 events (in 1998 - 2000)	Not attaining	ADEQ collected 6 samples at 3 sites in 1998-2000. TMDLs for cadmium, copper, zinc and pH were approved by EPA in 2003. Assessed as "not attaining" due to cadmium, copper and zinc exceedances, and low pH.
				varies by hardness (A&Ww chronic)		5 of 5 events (100% exceed)	Not attaining	
			Cadmium (total) µg/L	84 (FC)	27 - 290	4 of 6	Inconclusive (Not attaining)	
				50 (AgL)		4 of 6	Inconclusive (Not attaining)	
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	881 - 2110	5 of 5 events (in 1998 - 2000)	Not attaining	
				varies by hardness (A&Ww chronic)		5 of 5 events (100% exceed)	Not attaining	
			Copper (total) µg/L	1300 (FBC)	799 - 2140	4 of 6	Inconclusive (Not attaining)	Placed on the Planning List for TMDL follow-up monitoring and for missing core parameters: <i>Escherichia coli</i> , total metals (lead and mercury), and turbidity/SSC.
				500 (AgL)		6 of 6	Inconclusive (Not attaining)	

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
			pH SU	6.5 - 9.0 (A&Ww, FBC, AgL)	3.2 - 3.7	6 of 6	Inconclusive (Not attaining)	
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	6110 - 56,200	5 of 5 events (in 1998 - 2000)	Not attaining	
				varies by hardness (A&Ww chronic)		5 of 5 events (100% exceed)	Not attaining	
			Zinc (total) µg/L	25,000 (AgL)	5730 - 54,000	4 of 6	Inconclusive (Not attaining)	
Chimenea Creek headwaters - Rincon Creek AZ15050302-140 A&Ww, FC, FBC (tributary rule)	USGS Ambient Monitoring At Saguaro National Park SCCHM004.75 101593	2002 - 1 partial suite	No exceedances					
	USGS Ambient Monitoring Near Madrona ranger station SCCHM002.25 101584	2002 - 1 partial suite	No exceedances					
	Summary Row A&Ww Inconclusive FC Inconclusive FBC Inconclusive	2002 2 sampling events	No exceedances				Not assessed	Insufficient monitoring data to assess.
Cienega Creek headwaters - Gardner Canyon AZ15050302-006A A&Ww, FC, FBC, AgL Unique Water	ADEQ Ambient Monitoring SCCIE014.39 101176	2000 - 1 full suite 2001 - 5 full suites 2002 - 1 full suite	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - too numerous to count	1 of 5		
	ADEQ SEM Program Below Stevenson Canyon SCCIE12.38 100601	1998 - 1 partial suite	No exceedances					
	ADEQ Ambient Monitoring Below Narrows SCCIE011.80 100600	1998 - 1 partial suite	No exceedances					
	ADEQ Ambient Monitoring SCCIE010.20 101177	2000 - 1 full suite 2001 - 4 full suites 2002 - 1 full suite	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - too numerous to count	2 of 6		
			Turbidity NTU	50 (A&Ww)	1 - 54	1 of 6		

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1998 - 2002	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - too numerous to count	3 of 11 samples 2 of 6 events (in 2001)	Impaired	ADEQ collected 15 samples at 4 sites in 1998-2002. Assessed as "impaired" due to <i>Escherichia coli</i> exceedances.
	A&Ww Attaining FC Attaining FBC Impaired AgL Attaining	15 samples 8 sampling events	Turbidity NTU	50 (A&Ww)	1 - 54	1 of 14	Attaining	
Cienega Creek Gardner Canyon - USGS gage station (Pantano Wash) AZ15050302-006B A&Ww, FBC, FC, AgL	ADEQ Ambient Monitoring Below tilted beds SCCIE003.55 100599	1998 - 1 partial suite	No exceedances					
	ADEQ Ambient Monitoring SCCIE002.66 101178	2000 - 1 full suite 2001 - 4 full suites 2002 - 1 full suite	Dissolved oxygen mg/L	>6.0 (90% saturation)	5.5 - 9.6 (80 - 109%)	1 of 6		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in final assessment.
	ADEQ Ambient Monitoring SCCIE001.49 101179	2000 - 1 full suite 2001 - 4 full suites 2002 - 1 full suite	No exceedances					
	ADEQ Ambient Monitoring Above Davidson Canyon SCCIE001.20 100598	1998 - 1 partial suite	Dissolved oxygen mg/L	>6.0 (90% saturation)	5.4 (65%)	1 of 1		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in final assessment.
	ADEQ Ambient Monitoring At Marsh Station Rd. Below Davidson Canyon SCCIE001.07 100263	1998 - 1 partial suite	No exceedances					
	ADEQ Ambient Monitoring Above diversion dam SCCIE000.42 100595	1998 - 1 partial suite	Dissolved oxygen mg/L	>6.0 (90% saturation)	4.6 (57%)	1 of 1		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in final assessment.
	Summary Row A&Ww Attaining FC Attaining FBC Attaining AgL Attaining	1998 - 2002 16 samples 7 sampling events	No exceedances					ADEQ collected 16 samples at 6 sites in 1998-2002. Assessed as "attaining all uses."

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Cox Gulch headwaters - Three R Canyon AZ15050301-560 A&Ww, FBC, FC (tributary rule)	ADEQ TMDL Program Above European Mine Canyon SCCIE001.04	1999 - 1 partial suite	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	25	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	6000	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
			Copper (total) µg/L	500 (AgL)	8700	1 of 1		
				1300 (FBC)		1 of 1		
	ADEQ TMDL Program Below European Mine Canyon SCCIE000.85	1999 - 1 partial suite 2000 - 1 partial suite	Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	5900	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
			Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	15 - 60	2 of 2		
				varies by hardness (A&Ww chronic)		2 of 2		
			Cadmium (total) µg/L	50 (AgL)	72	1 of 2		
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	8200 - 18,000	2 of 2		
				varies by hardness (A&Ww chronic)		2 of 2		
			Copper (total) µg/L	500 (AgL)	8600 - 18,000	2 of 2		
				1300 (FBC)		2 of 2		
			pH SU	6.5 - 9.0 (A&Ww, FBC)	3.3	1 of 1		
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	3200 - 11,000	2 of 2		
				varies by hardness (A&Ww chronic)		2 of 2		

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1999 - 2000	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	15 - 60	3 of 3 samples 2 of 2 events (in 1999 and 2000)	Not attaining	ADEQ collected 3 samples at 2 sites in 1999-2000. Cadmium, copper, pH, and zinc loadings on this reach were addressed in the TMDL for Three R Canyon approved by EPA in 2003. *Although current data for cadmium, copper, zinc and pH are "inconclusive," the uses are assessed as "not attaining" until data indicate that all uses are being attained for parameters addressed in the TMDL. Placed on the Planning List for TMDL follow up monitoring and missing core parameters: <i>Escherichia coli</i> , dissolved oxygen, total mercury, turbidity/SSC.
	A&Ww Not attaining FC Inconclusive FBC Not attaining	3 samples 2 sampling events		varies by hardness (A&Ww chronic)	15 - 60	3 of 3 samples 2 of 2 events (insufficient events)	Inconclusive (Not attaining*)	
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	8000 - 18,000	3 of 3 samples 2 of 2 events (in 1999 - 2000)	Not attaining	
				varies by hardness (A&Ww chronic)	8000 - 18,000	3 of 3 samples 2 of 2 events (insufficient events)	Inconclusive (Not attaining*)	
			Copper (total) µg/L	1300 (FBC)	8600 - 18,000	3 of 3	Inconclusive (Not attaining*)	
			pH SU	6.5 - 9.0 (A&Ww, FBC)	3.3	1 of 1	Inconclusive (Not attaining*)	
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	3200 - 11,000	3 of 3 samples 2 of 2 events (in 1999 - 2000)	Not attaining	
				varies by hardness (A&Ww chronic)	3200 - 11,000	3 of 3 samples 2 of 2 events (insufficient events)	Inconclusive (Not attaining*)	
Cox Gulch, unnamed tributary of headwaters-Cox Gulch AZ15050301-877 A&We, PBC (tributary rule)	ADEQ TMDL Program Above Cox Gulch SCUCX000.01	1999 - 1 partial suite	Copper (dissolved) µg/L	varies by hardness (A&We)	7600	1 of 1		Missing core parameter: field pH.
			Copper (total) µg/L	1300 (PBC)	7600	1 of 1		
			Zinc (dissolved) µg/L	varies by hardness (A&We)	2900	1 of 1		

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1999	Copper (dissolved) µg/L	varies by hardness (A&We)	7600	1 of 1 event (in 1999)	Inconclusive (Not attaining*)	Insufficient monitoring data to assess. Copper and zinc loadings from this reach were addressed in the TMDL for Three R Canyon approved by EPA in 2003. *Although current data copper and zinc are "inconclusive," the uses are assessed as "not attaining" until data indicate that all uses are being attained for parameters addressed in the TMDL.
	A&We Not attaining	1 sampling event	Copper (total) µg/L	1300 (PBC)	7600	1 of 1	Inconclusive (Not attaining*)	
	PBC Not attaining		Zinc (dissolved) µg/L	varies by hardness (A&We)	2900	1 of 1 event (in 1999)	Inconclusive (Not attaining*)	
Harshaw Creek headwaters-Sonoita Creek AZ15050301-025 A&We, PBC, AgL	ADEQ TMDL Program Below unnamed trib (Endless Chain trib) SCHRC013.63	1999 - 1 partial suite	Copper (dissolved) µg/L	varies by hardness (A&We)	62	1 of 1		
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	4.6	1 of 1		
	ADEQ TMDL Program Below Trench Camp Mine SCHRC011.56	1998 - 3 partial suites	No exceedances					
	Summary Row	1998 - 1999	Copper (dissolved) µg/L	varies by hardness (A&We)	<15 - 62	1 of 4 samples 1 of 4 events (in 1999)	Inconclusive (Not attaining*)	ADEQ collected 4 samples at 2 sites in 1998-1999. TMDLs for copper, zinc, and low pH were approved by EPA in 2003. Assessed as "not attaining" due to copper exceedances and low pH. *Although current copper and pH data are inconclusive, this reach will remain "not attaining" until all uses are being attained for parameters addressed in the TMDLs. Placed on the Planning List for TMDL follow-up monitoring and missing core parameter: total lead.
	A&We Not attaining PBC Not attaining AgL Not attaining	4 samples 4 sampling events	pH SU	6.5 - 9.0 (A&We, PBC, AgL)	4.6 - 7.5	1 of 4	Inconclusive (Not attaining*)	
Harshaw Creek, unnamed tributary of (Endless Chain Mine trib) headwaters-Harshaw Creek AZ15050301-888 A&We, PBC (tributary rule)	ADEQ TMDL Program Above mined area SCUHR00.56	1999 - 2 partial suites	pH SU	6.5 - 9.0 (A&We, PBC, AgL)	5.2 - 6.3	1 of 2		
	ADEQ TMDL Program Above Endless Chain Mine SCUHR000.38	1999 - 1 partial suite	pH SU	6.5 - 9.0 (A&We, PBC, AgL)	6.2	1 of 1		

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&We Not attaining PBC Not attaining	1999 3 samples 2 sampling events	pH SU	6.5 - 9.0 (A&We, PBC)	5.2 - 6.3	1 of 3	Inconclusive (Not attaining*)	Insufficient monitoring data to assess. pH loadings from this reach were addressed in the TMDL for Harshaw Creek approved by EPA in 2003. Although current pH data is inconclusive, the assessment will remain "not attaining" until data indicate that all uses are being attained for parameters addressed in the TMDL.
Humboldt Canyon headwaters - Alum Gulch AZ15050301-340 A&Ww, FBC, FC (tributary rule)	ADEQ TMDL Program Intersection with jeep road SCHMC002.41	1999 - 1 partial suite	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	2.8	1 of 1		Missing core parameters: <i>Escherichia coli</i> , total mercury, and turbidity/SSC.
				varies by hardness (A&Ww chronic)		1 of 1		
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	540	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
			Copper (total) µg/L	500 (AgL)	550	1 of 1		
			pH SU	6.5 - 9.0 (A&Ww, PBC, AgL)	3.3	1 of 1		
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	210	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
	ADEQ TMDL Program Base of falls Above Humboldt well SCHMC001.27	1999 - 1 partial suite	Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	140	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	3.6	1 of 1		
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	85	1 of 1		
				varies by hardness (A&Ww chronic)		1 of 1		

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1999	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	2.8	2 of 2 samples 1 of 1 event (in 1999)	Inconclusive (Not attaining*)	<p>Insufficient monitoring data to assess. Cadmium, copper, zinc and pH loadings from this tributary were addressed in the Alum Gulch TMDLs approved by EPA in 2003.</p> <p>*Although current data for cadmium, copper, pH and zinc are "inconclusive," assessments will remain "not attaining" until data indicate that all uses are being attained for parameters addressed in the TMDL.</p> <p>Placed on the Planning List for TMDL follow-up monitoring and missing core parameters: <i>Escherichia coli</i>, turbidity/SSC, and total mercury.</p>
	A&Ww Not attaining FBC Not attaining FC Inconclusive	2 samples 1 sampling event		varies by hardness (A&Ww chronic)		2 of 2 samples 1 of 1 event (insufficient events)	Inconclusive (Not attaining*)	
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	140 - 540	2 of 2 samples 1 of 1 event (in 1999)	Inconclusive (Not attaining*)	
				varies by hardness (A&Ww chronic)		2 of 2 samples 1 of 1 event (insufficient events)	Inconclusive (Not attaining*)	
			pH SU	6.5 - 9.0 (A&Ww, FBC)	3.3 - 3.6	2 of 2	Inconclusive (Not attaining*)	
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	85 - 210	2 of 2 samples 1 of 1 event (in 1999)	Inconclusive (Not attaining*)	
				varies by hardness (A&Ww chronic)		2 of 2 samples 1 of 1 event (insufficient events)	Inconclusive (Not attaining*)	
Loma Verde Wash headwaters - unnamed trib to Tanque Verde Wash AZ15050302-268 A&We, PBC (tributary rule)	USGS Ambient Monitoring At Saguaro National Park SCLMV003.51 101585	2002 - 1 partial suite	No exceedances					
	USGS Ambient Monitoring At Saguaro National Park SCLMV003.50 101594	2002 - 1 partial suite	No exceedances					
	Summary Row A&We Inconclusive PBC Inconclusive	2002 2 sampling events	No exceedances				Not assessed	Insufficient monitoring data to assess.
Madera Canyon Creek headwaters - tributary at 31°E43'42"/110°E52'50" AZ15050301-322A A&Wc, FC, FBC, AgL	ADEQ Ambient Monitoring 1 mile Below Sprung Spring SCMAD007.63 100588	2001 - 1 partial suite	No exceedances					
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	2001 1 sampling event	No exceedances				Not assessed	Insufficient monitoring data to assess.

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Madrona Creek headwaters - Rincon Creek AZ15050302-138 A&Ww, FC, FBC (tributary rule)	USGS Ambient Monitoring Near Madrona Ranger Station SCMDN001.32 101628	2002 - 1 partial suite	No exceedances					
	Summary Row A&Ww Inconclusive FC Inconclusive FBC Inconclusive	2002 1 sampling event	No exceedances				Not assessed	Insufficient monitoring data to assess.
Nogales and East Nogales Wash Mexico border - Potrero Creek AZ15050301-011 A&Ww, PBC	ADEQ Fixed Station Network At Morley Street tunnel SCNGW004.23 100251	1998 - 3 full + 1 partial suite 1999 - 2 full + 2 partial suites 2000 - 3 full + 1 partial suite 2001 - 4 full suites 2002 - 1 full + 3 partial suites	Ammonia mg/L	varies by hardness (A&Ww chronic)	<0.02 - 9	4 of 18		
			Chlorine (total residual) µg/L	11 (A&Ww acute)	70 - 2830	12 of 12		
				5 (A&Ww chronic)		12 of 12		
			Chromium (total) µg/L	100 (PBC)	<10 - 250	1 of 18		
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	<10 - 24	1 of 18		
				varies by hardness (A&Ww chronic)		2 of 18		
			Dissolved oxygen mg/L	>6.0 (90% saturation) (A&Ww)	4.4 - 9.6 (63 - 108%)	3 of 18		
			<i>Escherichia coli</i> CFU/100 ml	576 (PBC)	<2 - too numerous to count	9 of 14		
			Lead (total) µg/L	15 (PBC)	<5 - 190	2 of 18		
			Turbidity NTU	50 (A&Ww)	2 - 2730	5 of 18		
	ADEQ Ambient Monitoring South of Rte. 82 overpass to E. Calle Sonora Rd. bridge (5 sites) SCNGW003.8 - SCNGW001.7	1998 - 1 chlorine	Chlorine (total residual) µg/L	11 (A&Ww acute)	50 - 380	5 of 5		
				5 (A&Ww chronic)		5 of 5		

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1998 - 2002	Ammonia mg/L	varies by hardness (A&Ww chronic)	<0.02 - 9	4 of 18 samples 4 of 18 events (22% exceed)	Inconclusive	<p>ADEQ collected 21 samples at 2 sites in 1998 - 2002. Assessed as "impaired" due to chlorine and <i>Escherichia coli</i> exceedances.</p> <p>*Reach was on the 2002 303(d) List for turbidity. Although current data are inconclusive based on the former standard, reach is will remain "not attaining" for turbidity and placed in 4D until sufficient turbidity or suspended sediment concentration (SSC) data are collected to make an assessment of "attaining" or "impaired."</p> <p>Placed on the Planning List due to:</p> <ol style="list-style-type: none"> 1. Ammonia exceedances, 2. Copper exceedances, 3. Turbidity exceedances. <p>Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed.</p>
	A&Ww Impaired PBC Impaired	21 samples 21 sampling events	Chlorine (total residual) µg/L	11 (A&Ww acute)	70 - 2830	17 of 17 samples 12 of 12 events (1998-2001)	Impaired	
				5 (A&Ww chronic)		17 of 17 samples 12 of 12 events (100% exceed)	Impaired	
			Chromium (total) µg/L	100 (PBC)	<10 - 250	1 of 18	Attaining	
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	<10 - 24	1 of 18 samples 1 of 18 events (last 3 years with no acute exceedances)	Attaining	
				varies by hardness (A&Ww chronic)		2 of 18 samples 2 of 18 events (11% exceed)	Inconclusive	
			Dissolved oxygen mg/L	>6.0 (90% saturation) (A&Ww)	4.4 - 9.6 (63 - 108%)	3 of 18	Attaining	
			<i>Escherichia coli</i> CFU/100 ml	576 (PBC)	<2 - too numerous to count	9 of 14 samples 9 of 14 events (exceedances every year)	Impaired	
			Lead (total) µg/L	15 (PBC)	<5 - 190	2 of 18	Attaining	
			Turbidity NTU	50 (A&Ww)	2 - 2730	5 of 18	Inconclusive (Not attaining*)	

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Potrero Creek Interstate19 - Santa Cruz River AZ15050301-500B A&Ww, FC, FBC, AgL	ADEQ Ambient Monitoring 0.3 miles north of Nogales Fire Station B SCPOT003.5 100705	1998 - 1 chlorine	Chlorine (total residual) µg/l	11 (A&Ww acute)	30	1 of 1		
				5 (A&Ww chronic)		1 of 1		
	ADEQ Ambient Monitoring Half mile north of Nogales suburban Fire Station B SCPOT003.38 100207	1998 - 1 partial suite	No exceedances					
	ADEQ Ambient Monitoring Bridge on Old Tucson Road SCPOT001.9 100703	1998 - 1 chlorine	Chlorine (total residual) µg/L	11 (A&Ww acute)	80	1 of 1		
				5 (A&Ww chronic)		1 of 1		
	Friends of the Santa Cruz At Ruby Road SCPOT001.53 100571	1998 - 12 partial suites 1999 - 7 partial suites 2000 - 11 partial suites 2001 - 7 partial suites	Dissolved oxygen mg/L	>6.0 (90% saturation) (A&Ww)	0.5 - 14	3 of 31		
			Turbidity NTU	50 (A&Ww)	2 - 200	1 of 15		
	ADEQ Ambient Monitoring Above Wastewater Treatment Plant SCPOT000.72 100208	1998 - 1 partial suite	Chlorine (total residual) µg/L	11 (A&Ww acute)	80	1 of 1		
				5 (A&Ww chronic)		1 of 1		
			Copper (dissolved) µg/L	varies by hardness (A&Ww chronic)	17	1 of 1		
	ADEQ Ambient Monitoring At Santa Cruz River SCPOT000.1 100702	1998 - 1 chlorine	Chlorine (total residual) µg/L	11 (A&Ww acute)	800	1 of 1		
				5 (A&Ww chronic)		1 of 1		
	Summary Row A&Ww Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	1998 - 2001 47 samples 43 sampling events	Chlorine (total residual) µg/L	11 (A&Ww acute)	30 - 800	4 of 4 samples 1 of 1 event (in 1998)	Inconclusive	ADEQ and Friends of the Santa Cruz River (a volunteer monitoring group) collected 47 samples at 6 sites in 1998-2001. Assessed as "inconclusive" and placed on the Planning List due to: 1. Chlorine exceedances, 2. Copper exceedances, 3. Missing core parameters: dissolved metals (cadmium, copper, and zinc) and total metals (mercury, lead, and copper).
				5 (A&Ww chronic)	30 - 800	4 of 4 samples 1 of 1 event (insufficient events)	Inconclusive	
			Copper (dissolved) µg/L	varies by hardness (A&Ww chronic)	17	1 of 1 sample 1 of 2 events (insufficient events)	Inconclusive	

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
			Dissolved oxygen mg/L	>6.0 (90% saturation) (A&Ww)	0.5 - 14	3 of 33	Attaining	
			Turbidity NTU	50 (A&Ww)	2 - 200	1 of 17	Attaining	
Redrock Canyon Creek headwaters - Harshaw Creek AZ15050301-576 A&Ww, FBC, FC	ADEQ Ambient Monitoring Near Patagonia SCRED002.17 101080	2000 - 1 full suite 2001 - 4 full suites	Dissolved oxygen mg/L	>6.0 (90% saturation) (A&Ww)	5.2 - 10.0 (71 - 110%)	1 of 4		Low dissolved oxygen due to natural drying of the stream and not anthropogenic causes. Not considered in final assessment.
	Summary Row A&Ww Attaining FBC Attaining FC Attaining	2000 - 2001 5 samples 5 sampling events	No exceedances					ADEQ collected 5 samples in 2000-2001. Assessed as "attaining all uses."
Sabino Canyon Creek tributary at 32°23'28"/110°47'00" - Tanque Verde Wash AZ15050302-014B A&Ww, FC, FBC, DWS, Agl	ADEQ Ambient Monitoring Above East Fork Sabino Cyn SCSAB007.56 100635	2001 - 1 partial suite	No exceedances					Low dissolved oxygen due to low flow conditions and not anthropogenic causes. Not considered in final assessment.
	ADEQ Ambient Monitoring Near Tucson SCSAB004.39 101152	2000 - 1 full suite 2001 - 3 full suites	Dissolved oxygen mg/L	> 6.0 (90% saturation) (A&Ww)	5.7 - 10.5 (72 - 97%)	1 of 4		Lab detection limits for cadmium, copper, and zinc were too high to use results for assessment.
	Summary Row A&Ww Inconclusive FC Attaining FBC Attaining DWS Attaining Agl Attaining	2000 - 2001 5 samples 4 sampling events	No exceedances					ADEQ collected 5 samples at 2 sites in 2000-2001. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: dissolved metals (cadmium, copper, zinc).
Santa Cruz River headwaters - Mexico border AZ15050301-268 A&Ww, FC, FBC, Agl, AgL	Friends of the Santa Cruz River Near Lochiel SCSCR099.03 100242	2000 - 1 full suite 2001 - 3 full suites	No exceedances					
	Summary Row A&Ww Attaining FC Attaining FBC Attaining Agl Attaining AgL Attaining	2000 - 2001 4 sampling events	No exceedances					Friends of the Santa Cruz River (a volunteer monitoring group) collected 4 samples in 2000-2001. Assessed as "attaining all uses."
Santa Cruz River Mexican border - Nogales WWTP AZ15050301-010 A&Ww, FC, FBC, DWS, Agl, AgL	ADEQ Ambient Monitoring At International Boundary SCSCR097.28 100239	1998 - 1 partial suite 1999 - 2 full suites 2000 - 4 full suites 2001 - 4 full suites	Dissolved oxygen mg/L	> 6.0 (90% saturation) (A&Ww)	4.3 - 10.0 (64 - 113%)	2 of 11		
			<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 10,000	2 of 11		
			Lead (total) µg/L	15 (DWS, FBC)	<5 - 62	1 of 11		

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
			Manganese (total) µg/L	980 (DWS)	<50 - 1500	1 of 11		
			Mercury (total) µg/L	0.6 (FC)	<0.5 - 0.8	1 of 11		
			Turbidity NTU	50 (A&Ww)	0.96 - 1854	1 of 9		
	Friends of the Santa Cruz River At Guevavi Ranch SCSCR091.90 100246	1998 - 2 partial suites 1999 - 4 partial suites 2000 - 6 partial suites 2001 - 4 partial suites	Turbidity NTU	50 (A&Ww)	2 - 200	1 of 9		
	Summary Row A&Ww Attaining FC Attaining FBC Impaired DWS Attaining AgL Attaining AgL Attaining	1998 - 2001 27 samples 16 sampling events	Dissolved oxygen mg/L	> 6.0 (90% saturation) (A&Ww)	4.3 - 10.0 (64 - 113%)	2 of 20	Attaining	ADEQ and Friends of the Santa Cruz River (a volunteer monitoring group) collected 27 samples at 2 sites in 1998-2001. Assessed as "impaired" due to <i>Escherichia coli</i> exceedances.
			<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 10,000	2 of 23 samples 2 of 20 events (occurred in 1999 and 2000)	Impaired	
			Lead (total) µg/L	15 (DWS, FBC)	<5 - 62	1 of 15	Attaining	
			Manganese (total) µg/L	980 (DWS)	<50 - 1500	1 of 15	Attaining	
			Mercury (total) µg/L	0.6 (FC)	<0.5 - 0.8	1 of 15	Attaining	
			Turbidity NTU	50 (A&Ww)	0.25 - 200	2 of 22	Attaining	
Santa Cruz River Nogales WWTP - Josephine Cyn. AZ15050301-009 A&Wedw, PBC, AgL	Friends of the Santa Cruz River At Rio Rico SCSCR087.08 100238	1998 - 12 partial suites 1999 - 5 partial suites 2000 - 9 partial suites 2001 - 7 partial suites	Turbidity NTU	50 (A&Wedw)	3 - 200	1 of 15		
	Summary Row A&Wedw Inconclusive PBC Attaining AgL Inconclusive	1998 - 2001 33 sampling events	Turbidity NTU	50 (A&Wedw)	3 - 200	1 of 15	Attaining	Friends of the Santa Cruz River (a volunteer monitoring group) collected 33 samples in 1998-2001. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: dissolved metals (cadmium, copper, and zinc) and total metals (copper and lead).

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Santa Cruz River Josephine Canyon - Tubac bridge AZ15050301-008A A&Wedw, PBC, AgL	Friends of the Santa Cruz River At Santa Gertrudis Lane SCSCR080.50 100247	1998 - 12 partial suites 1999 - 12 partial suites 2000 - 11 partial suites 2001 - 9 partial suites	Turbidity	50 (A&Wedw)	14 - 200	8 of 20		
	ADEQ Ambient Monitoring Near Tubac SCSCR080.45 101002	2000 - 1 full suite 2001 - 1 full suite	Chlorine (total residual) µg/L	11 (A&Wedw acute)	90	1 of 1		
				5 (A&Wedw chronic)		1 of 1		
	Summary Row A&Wedw Not attaining PBC Attaining AgL Inconclusive	1998 - 2001 46 samples 45 sampling events	Chlorine (total residual) µg/L	11 (A&Wedw acute)	90	1 of 1 event (in 2001)	Inconclusive	ADEQ and Friends of the Santa Cruz River (a volunteer monitoring group) collected 46 samples at 2 sites in 1998-2001. Assessed as "not attaining" due to exceedances of the former turbidity standard. *Turbidity exceedances indicate impairment based on the former turbidity standard. Assessed as "not attaining" until sufficient turbidity or suspended sediment concentration (SSC) data are collected to make an assessment of "attaining" or "impaired." Placed on the Planning List due to chlorine exceedance and missing core parameters: dissolved metals (cadmium, copper, and zinc) and total metals (copper and lead).
				5 (A&Wedw chronic)	90	1 of 1 event (insufficient events)	Inconclusive	
			Turbidity NTU	50 (A&Wedw)	14 - 200	8 of 20	Not attaining (see comment*)	

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Santa Cruz River Tubac bridge - Sopori Wash AZ15050301-008B A&We, PBC, AgL	Friends of the Santa Cruz R. North of Chavez Siding Rd. SCSCR081.34 100244	1998 - 10 partial suites 1999 - 12 partial suites 2000 - 11 partial suites 2001 - 9 partial suites	pH SU	6.5 - 9.0 (A&We, PBC, AgL)	2.6 - 8.0	1 of 34		
	Summary Row A&We Inconclusive PBC Attaining AgL Inconclusive	1998 - 2001 42 samples 42 sampling events	pH SU	6.5 - 9.0 (A&We, PBC, AgL)	2.6 - 8.0	1 of 34	Attaining	Friends of the Santa Cruz River (a volunteer monitoring group) collected 42 samples in 1998 - 2001. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: dissolved metals (cadmium, copper, and zinc) and total metals (copper and lead).
Santa Cruz River Roger Rd. WWTP outfall - Rillito Creek AZ15050301-003B A&We, PBC	Pima County Wastewater Management Department SC-01 SCSCR033.90	2001 - 3 dissolved oxygen	No exceedances					
	Pima County Wastewater Management Department SC-02 SCSCR032.49	2001 - 2 dissolved oxygen	No exceedances					
	Summary Row A&Wedw Inconclusive PBC Inconclusive	2001 5 samples 3 sampling events	No exceedances					Pima County collected 5 samples at 2 sites in 2001. Assessed as "inconclusive" and placed on the Planning List due to missing core parameters: <i>Escherichia coli</i> , pH, and dissolved metals (cadmium, copper, and zinc).
Santa Cruz River Canada del Oro - HUC boundary 15050303 AZ15050301-001 A&Wedw, PBC	Pima County Wastewater Management Department SC-03 SCSCR030.15	2001 - 3 dissolved oxygen	No exceedances					
	Pima County Wastewater Management Department SC-04 SCSCR028.64	2001 - 1 dissolved oxygen	No exceedances					
	Pima County Wastewater Management Department SC-05 SCSCR027.69	2001 - 3 dissolved oxygen	No exceedances					
	Pima County Wastewater Management Department SC-06 SCSCR026.80	2001 - 1 dissolved oxygen	No exceedances					
	ADEQ Ambient Monitoring Near Marana SCSCR025.40	2001 - 4 full suites	Chlorine (total residual) µg/L	11 (A&Wedw acute)	0 - 480	1 of 2		

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TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
				5 (A&Wedw chronic)		1 of 2		
	Pima County Wastewater Management Department SC-07 SCSCR025.17	2001 - 2 dissolved oxygen	No exceedances					
	Summary Row	2001	Chlorine (total residual) µg/L	11 (A&Wedw acute)	0 - 480	1 of 2 samples 1 of 2 events (in 2001)	Inconclusive	ADEQ and Pima County collected a total of 14 samples at 6 sites in 2001. Assessed as "attaining some uses" and placed on the Planning List due to chlorine exceedance.
	A&Wedw Inconclusive PBC Attaining	14 samples 9 sampling events		5 (A&Wedw chronic)	0 - 480	1 of 2 samples 1 of 2 events (insufficient events)	Inconclusive	
Santa Cruz River HUC boundary 15050303 - Baumgartner Rd. AZ15050303-005A A&Wedw, PBC	Pima County Wastewater Management Department SC-08 SCSCR024.30	2001 - 3 dissolved oxygen	No exceedances					
	Pima County Wastewater Management Department SC-09 SCSCR022.19	2001 - 3 dissolved oxygen	No exceedances					
	Pima County Wastewater Management Department SC-10 SCSCR021.50	2001 - 3 dissolved oxygen	No exceedances					
	Pima County Wastewater Management Department SC-11 SCSCR019.39	2001 - 3 dissolved oxygen	No exceedances					
	Pima County Wastewater Management Department SC-12 SCSCR017.96	2001 - 3 dissolved oxygen	No exceedances					
	Summary Row	2001	No exceedances					Pima County collected 15 samples at 5 sites in 2001. Assessed as "inconclusive" and placed on the Planning List due to missing core parameters: <i>Escherichia coli</i>, pH, and dissolved metals (cadmium, copper, and zinc).
Sonoita Creek 750 feet below WWTP - Santa Cruz AZ15050301-013C A&Ww, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring At Circle Z Ranch SCSON007.09 101154	2000 - 1 full suite	Copper (dissolved) µg/L	varies by hardness (A&Ww chronic)	<10 - 34	1 of 4		
		2001 - 3 full suites	Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	67 - 860	2 of 4		

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
				varies by hardness (A&Ww chronic)		2 of 4		
	ADEQ TMDL Program Above Temporal Gulch, Below spring at Nature Cons. SCSON015.6	1998 - 3 partial suites	Dissolved oxygen mg/l	>6.0 (90% saturation) (A&Ww)	5.2 - 7.3 (64 - 81%)	1 of 3		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in final assessment.
	Summary Row	1998 - 2001	Copper (dissolved) µg/L	varies by hardness (A&Wedw chronic)	<10 - 34	1 of 4 events (insufficient events)	Inconclusive	ADEQ collected 7 samples in 1998- 2001. Assessed as "impaired" due to zinc exceedances. Placed on the Planning List due to copper exceedance.
	A&Ww Impaired FC Attaining FBC Attaining AgI Attaining AgL Attaining	7 sampling events	Zinc (dissolved) µg/L	varies by hardness (A&Wedw acute)	67 - 860	2 of 4 events (in 2000-2001)	Impaired	
				varies by hardness (A&Wedw chronic)	67 - 860	2 of 4 events (insufficient events)	Inconclusive	
Sycamore Canyon Creek headwaters - Mexico border AZ15080200-002 A&Ww, FC, FBC, AgL	ADEQ Ambient Monitoring Above Penasco Canyon RMSYC002.33 100660	2001 - 1 partial suite	No exceedances					Missing core parameters: <i>Escherichia</i> <i>coli</i> , dissolved metals (copper, cadmium, and zinc). Lab reporting limits for dissolved metals were too high to use results for assessment.
	Summary Row A&Ww Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	2001 1 sampling event	No exceedances				Not assessed	Insufficient monitoring data to assess.
Three R Canyon headwaters - 31°28'35"/110°46'19" AZ15050301-558A A&We, PBC, AgL	ADEQ TMDL Program Above 3R Mine, south branch SCTHC004.50	1999 - 1 partial suite	Copper (dissolved) µg/L	varies by hardness (A&We)	380	1 of 1		
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	3.7	1 of 1		
	ADEQ TMDL Program Above most upstream springs, below 3R mine SCTHC004.07	1999 - 1 partial suite	Copper (dissolved) µg/L	varies by hardness (A&We)	7200	1 of 1		
			Copper (total) µg/L	500 (AgL)	7700	1 of 1		
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	3.5	1 of 1		

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&We Not attaining PBC Not attaining AgL Not attaining	1999 2 samples 1 sampling event	Copper (dissolved) µg/L	varies by hardness (A&We)	380 - 7200	2 of 2 samples 1 of 1 event (in 1999)	Inconclusive (Not attaining)	Insufficient monitoring data to assess. TMDLs for cadmium, copper, zinc, and pH were approved by EPA in 2003. *Although current pH and copper data are "inconclusive", designated uses will remain "not attaining" until data indicate that all uses are being attained for all parameters addressed in the TMDL. Placed on the Planning List for TMDL follow-up monitoring and missing core parameter: total lead.
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	3.7	2 of 2	Inconclusive (Not attaining*)	
Three R Canyon 31E28'35"/110E46'19"- 31E28'27"/110E47'12" AZ15050301-558B A&Ww, FC, FBC, AgL	ADEQ TMDL Program Below most upstream springs SCTHC004.01	1998 - 3 partial suites 1999 - 1 partial suite 2000 - 1 partial suite	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	35 - 59	5 of 5		
				varies by hardness (A&Ww chronic)		5 of 5		
			Cadmium (total) µg/L	50 (AgL)	40 - 54	2 of 5		
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	44,000 - 71,900	5 of 5		
				varies by hardness (A&Ww chronic)		5 of 5		
			Copper (total) µg/L	1300 (FBC)	45,200 - 66,100	5 of 5		
				500 (AgL)		5 of 5		
			pH SU	6.5 - 9.0 (A&Ww, FBC, AgL)	2.9 - 3.1	4 of 4		
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	850 - 1750	5 of 5		
				varies by hardness (A&Ww chronic)		5 of 5		

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1998 - 2000	Cadmium (dissolved) µg/L	varies by hardness (A&Ww acute)	35 - 59	5 of 5 events (1998-2000)	Not attaining	ADEQ collected 5 samples in 1998-2000. TMDLs for cadmium, copper, zinc, and pH were approved by EPA in 2003. Assessed as "not attaining" due to cadmium, copper and zinc exceedances, and low pH. *Although current data for some designated uses are inconclusive, the reach will remain "not attaining" until data indicate that all uses are being attained for parameters addressed in the TMDL. Placed on the Planning List for TMDL follow-up monitoring and missing core parameters: <i>Escherichia coli</i> , total lead, total mercury, and turbidity/SSC.
	A&Ww Not attaining FC Inconclusive FBC Not attaining AgL Not attaining	5 samples 5 sampling events		varies by hardness (A&Ww chronic)	35 - 59	5 of 5 events (100% exceed)	Not attaining	
			Cadmium (total) µg/L	50 (AgL)	40 - 54	2 of 5	Inconclusive (Not attaining*)	
			Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	44,000 - 71,900	5 of 5 events (in 1998-2000)	Not attaining	
				varies by hardness (A&Ww chronic)	44,000 - 71,900	5 of 5 events (100% exceed)	Not attaining	
			Copper (total) µg/L	1300 (FBC)	45,200 - 66,100	5 of 5	Inconclusive (Not attaining*)	
				500 (AgL)	45,200 - 66,100	5 of 5	Inconclusive (Not attaining*)	
			pH SU	6.5 - 9.0 (A&Ww, FBC, AgL)	2.9 - 3.1	4 of 5	Inconclusive (Not attaining*)	
			Zinc (dissolved) µg/L	varies by hardness (A&Ww acute)	850 - 1750	5 of 5 events (in 1998- 2000)	Not attaining	
				varies by hardness (A&Ww chronic)	850 - 1750	5 of 5 events (100% exceed)	Not attaining	
Three R Canyon 31°E28'27"/110°E47'12" - Sonoita Creek AZ15050301-558C A&We, PBC, AgL	ADEQ TMDL Program Below Cox Gulch SCTHC003.03	1998 - 2 partial suites	Copper (dissolved) µg/L	varies by hardness (A&We)	12,500 - 36,200	2 of 2		
			Copper (total) µg/L	1300 (PBC)	14,800 - 34,500	2 of 2		
				500 (AgL)		2 of 2		
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	3.4 - 3.9	2 of 2		
			Zinc (dissolved) µg/L	varies by hardness (A&We)	920 - 5010	1 of 2		

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1998	Copper (dissolved) µg/L	varies by hardness (A&We)	12,500 - 36,200	2 of 2 events (in 1998)	Not attaining	Insufficient monitoring data to assess. TMDLs for cadmium, copper, zinc, and pH were approved by EPA in 2003. *Although current data for pH and zinc are "inconclusive," assessments will remain "not attaining" until data indicate that all uses are being attained for parameters addressed in the TMDL. Placed on the Planning List for TMDL follow-up monitoring and missing core parameters: <i>Escherichia coli</i> , total lead, total mercury, and turbidity/SSC.
	A&We Not attaining PBC Not attaining AgL Not attaining	2 samples 2 sampling events	Copper (total) µg/L	1300 (PBC)	14,800 - 34,500	2 of 2	Inconclusive (Not attaining*)	
				500 (AgL)		2 of 2	Inconclusive (Not attaining*)	
			pH SU	6.5 - 9.0 (A&We, PBC, AgL)	3.4 - 3.9	2 of 2	Inconclusive (Not attaining*)	
			Zinc (dissolved) µg/L	varies by hardness (A&We)	920 - 5010	1 of 2 (in 1998)	Inconclusive (Not attaining*)	
Three R Canyon - <u>unnamed</u> tributary of headwaters - Three R Canyon AZ15050301-889 A&We, PBC (tributary rule)	ADEQ TMDL Program Upstream from 3R Mine, north tributary SCUTH00.30	1999 - 1 partial suite	Copper (dissolved) µg/L	varies by hardness (A&We)	1400	1 of 1		
			pH SU	6.5 - 9.0 (A&We, PBC)	3.8	1 of 1		
	Summary Row	1999	Copper (dissolved) µg/L	varies by hardness (A&We)	1400	1 of 1 (in 1999)	Inconclusive (Not attaining*)	Insufficient monitoring data to assess. Copper and pH loading from this reach were addressed in the Three R Canyon TMDL approved by EPA in 2003. *Although current copper and pH data are "inconclusive," assessments will remain "not attaining" until data indicate that all uses are being attained for parameters addressed in the TMDL.
	A&We Not attaining PBC Not attaining	1 sampling event	pH SU	6.5 - 9.0 (A&We, PBC)	3.8	1 of 1	Inconclusive (Not attaining*)	

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
LAKE MONITORING DATA								
Arivaca Lake AZL15050304-0080 A&Ww, FC, FBC, Agl, AgL	ADEQ Lakes Program Routine Monitoring SCARI-A 100000	1998 - 3 partial suites 2000 - 1 partial suite 2001 - 3 full suites	Dissolved oxygen mg/L	>6.0 (A&Ww)	1.8 - 12.9 (25 - 150%)	1 of 7		
			pH SU	6.5 - 9.0 (A&Ww, FBC, Agl, AgL)	6.3 - 9.5	1 of 7		
			Selenium (total) µg/L	2.0 (A&Ww chronic)	<2 - 7	1 of 7		
	Summary Row A&Ww Inconclusive FC Not attaining* FBC Inconclusive Agl Inconclusive AgL Inconclusive	1998 - 2001 7 samples 7 sampling events	Dissolved oxygen mg/L	>6.0 (A&Ww)	1.8 - 12.91 (25 - 150%)	1 of 7	Inconclusive	ADEQ collected 7 samples in 1998-2001. Assessed as “not attaining” due to mercury in fish tissue. *A TMDL for mercury in fish tissue was approved by EPA in 1999. The lake will remain “not attaining” until sufficient data are collected to indicate that mercury in fish tissue is no longer a concern. Placed on the Planning List due to a fish kill in 1999. Fish kill may be evidence of a narrative standard violation.
			pH SU	6.5 - 9.0 (A&Ww, FBC, Agl, AgL)	6.3 - 9.5	1 of 7	Inconclusive	
			Selenium (total) µg/L	2.0 (A&Ww chronic)	<2 - 7	1 of 7 events	Inconclusive	Also placed on the Planning List for TMDL follow-up monitoring, low dissolved oxygen, high pH, selenium exceedances, and missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).
Kennedy Lake AZL15050301-0720 A&Ww, FC, PBC	AGFD Urban Lakes Study SCKEN-A 100028	1998 - 11 field	No exceedances					
	AGFD Urban Lakes Study SCKEN-B 101052	1998 - 11 field	pH	6.5 - 9.0 (A&Ww, PBC)	8.5 - 9.3	1 of 11		
	AGFD Urban Lakes Study SCKEN-AB	1998 - 4 partial suites	No exceedances					
	Summary Row A&Ww Inconclusive FC Attaining PBC Inconclusive	1998 26 samples 11 sampling events	pH SU	6.5 - 9.0 (A&Ww, PBC)	8.5 - 9.3	1 of 11	Attaining	AGFD collected 26 samples at 3 sites in 1998. Assessed as “attaining some uses” and placed on the Planning List due to missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).
Lakeside Lake AZL15050302-0760 A&Ww, FC, PBC	AGFD Urban Lakes Study SCLAK-A 100034	1998 - 12 partial suites	Dissolved oxygen mg/L	>6.0 (90% saturation) (A&Ww)	2.4 - 17.1 (32 - 176%)	2 of 12		
			pH SU	6.5 - 9.0 (A&Ww, PBC)	7.3 - 9.9	2 of 12		
	Univ. of Arizona Lake Study Site A	1998 - 11 partial suites	Ammonia mg/L	varies by pH and temperature (A&Ww)	0.05 - 1.4	1 of 10		

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
			Dissolved oxygen mg/L	>6.0 (A&Ww)	1.6 - 19.5	3 of 10		
			pH SU	6.5 - 9.0 (A&Ww, PBC)	6.8 - 9.5	1 of 10		
			Turbidity NTU	25 (A&Ww)	6 - 300	7 of 10		
	AGFD Urban Lakes Study and Routine Monitoring SCLAK-B 100035	1998 - 11 partial suites 2002 - 2 partial suites	Dissolved oxygen mg/L	>6.0 (A&Ww)	1.5 - 14.4 (18 - 149%)	2 of 11		
			pH SU	6.5 - 9.0 (A&Ww, PBC)	7.5 - 9.8	1 of 11		
	AGFD Urban Lakes Study SCLAK-AB 101059	1998 - 4 partial suites	No exceedances					
	Univ. of Arizona Lake Study Site H	1998 - 11 partial suites	Ammonia mg/L	varies by pH and temperature (A&Ww)	0.2 - 1.5	2 of 11		
			Dissolved oxygen mg/L	>6.0 (A&Ww)	1.0 - 17.1	5 of 11		
			Turbidity NTU	25 (A&Ww)	0.2 - 380	7 of 11		
	Univ. of Arizona Lake Study Site I	1998 - 11 partial suites	Ammonia mg/L	varies by pH and temperature (A&Ww)	0.3 - 2.4	1 of 11		
			Dissolved oxygen mg/L	>6.0 (A&Ww)	1.0 - 19.2	4 of 11		
			pH SU	6.5 - 9.0 (A&Ww, PBC)	7.3 - 9.4	1 of 11		
			Turbidity NTU	25 (A&Ww)	0.2 - 500	7 of 11		
	Summary Row A&Ww Impaired FC Attaining PBC Inconclusive	1998 - 2002 55 samples 25 sampling events	Ammonia mg/L	varies by pH and temperature (A&Ww chronic)	0.05 - 2.4	4 of 33 samples 2 of 11 events (18% exceed)	Inconclusive	AGFD and Univ. of Arizona collected 55 samples in 1998-2002. Assessed as "impaired" due to low dissolved oxygen. *Turbidity exceedances indicate impairment based on the former standard. Assessed as "not attaining" for turbidity and placed on the 4D list. Investigation into the causes and sources of turbidity will be scheduled during the next monitoring cycle for this watershed. Also placed on the Planning List due to chronic ammonia exceedances and missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).
			Dissolved oxygen mg/L	>6.0 (A&Ww)	1.0 - 19.5	16 of 55	Impaired	
			pH SU	6.5 - 9.0 (A&Ww, PBC)	6.8 - 9.9	5 of 55	Attaining	
			Turbidity NTU	25 (A&Ww)	0.2 - 500	21 of 34	Not attaining (see comment*)	

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Parker Canyon Lake AZL15050301-1040 A&Wc, FC, FBC, Agl, AgL	ADEQ Lakes Program SCPAK-A 100057	2000 - 1 partial suite 2001 - 3 full suites	No exceedances					
	ADEQ Lakes Program SCPAK-D 100058	1998 - 2 partial suites	No exceedances					
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Attaining AgL Attaining	1998 - 2001 6 samples 6 sampling events	No exceedances					ADEQ collected 6 samples at 2 sites in 1998-2001. Assessed as "attaining some uses." Placed on the Planning List due to a fish consumption advisory (issued in 2002) for mercury in fish tissue and missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).
Patagonia Lake AZL15050301-1050 A&Wc, FC, FBC, DWS, Agl, AgL	ADEQ Lakes Program SCPAT-A 100060	1998 - 2 partial suites 2000 - 1 partial suite 2001 - 3 partial suites	No exceedances					
	Summary Row A&Wc Inconclusive FC Attaining FBC Inconclusive DWS Attaining Agl Attaining AgL Attaining	1998 - 2001 6 samples 6 sampling events	No exceedances					ADEQ collected 6 samples in 1998-2001. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: <i>Escherichia coli</i> and turbidity.
Pena Blanca Lake AZL15050301-1070 A&Wc, FC, FBC, Agl, AgL	ADEQ Lakes Program SCPEN-A 100064	1998 - 2 partial suites 2000 - 1 partial suite 2001 - 3 partial suites	pH	6.5 - 9.0	6.1 - 8.6	1 of 6		
			SU	(A&Ww, FBC, AgL)				
			Selenium (total) µg/L	2.0 (A&Wc chronic)	<2 - 4	1 of 6		
			Turbidity NTU	10	2 - 13	1 of 3		

TABLE 19. SANTA CRUZ - RIO MAGDALENA - RIO SONOYTA WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1998 - 2001	pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	6.1 - 8.6	1 of 6	Inconclusive	ADEQ collected 6 samples in 1998-2001.
	A&Wc Inconclusive FC Not attaining** FBC Inconclusive AgL Attaining AgL Inconclusive	6 samples 6 sampling events	Selenium (total) µg/L	2.0 (A&Wc chronic)	<2 - 4	1 of 6 samples 1 of 6 events (17% exceed)	Inconclusive	**A TMDL for mercury in fish tissue was approved by EPA in 1999. Assessed as "not attaining" until sufficient data are collected to indicate that mercury in fish tissue is no longer a concern.
			Turbidity NTU	10 (A&Wc)	2 - 13	1 of 3	Inconclusive (see comment*)	Placed on the Planning List for TMDL follow-up monitoring, pH and selenium exceedances, and missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc). *Also placed on the Planning List due to exceedances of the former turbidity standard. Further investigation into the causes and sources of turbidity will be scheduled during the next monitoring cycle for this watershed.
Rose Canyon Lake AZL15050302-1260 A&Wc, FC, FBC, AgL	ADEQ Lakes Program SCROS-A 100183	1998 - 1 partial suite	pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	6.2 - 9.8	1 of 3 high		
		2000 - 1 partial suite	Turbidity NTU	10 (A&Wc)	4 - 30	2 of 3 low		
	Summary Row	1998 - 2001	pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	6.2 - 9.8	3 of 3 (1 of 3 high, 2 of 3 low)	Inconclusive	ADEQ collected 5 samples in 1998-2001. Assessed as "attaining some uses" and placed on the Planning List due to exceedances of pH and missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).
	A&Wc Inconclusive FC Attaining FBC Inconclusive AgL Inconclusive	5 samples 5 sampling events	Turbidity NTU	10 (A&Ww)	4 - 30	1 of 4	Inconclusive (see comment*)	*Also placed on the Planning List due to exceedances of the former turbidity standard. Further investigation into the causes and sources of turbidity will be scheduled during the next monitoring cycle for this watershed.

TABLE 20. SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- STREAM ASSESSMENTS				
Alum Gulch headwaters - 31E28'20"/110E43'51" 1 mile AZ15050301-561A	A&We Not attaining PBC Not attaining AgL Not attaining Category 4A -- Not attaining	On the Planning List due to: 1. <u>Missing core parameter</u> : total lead. 2. TMDL follow-up monitoring for <u>cadmium, copper, pH, and zinc</u> . Total cadmium exceedances in 3 of 4 samples, dissolved copper exceedances in 2 of 2 sampling events, total copper exceedances in 1 of 4 samples, low pH in 4 of 4 samples, dissolved zinc exceedances in 2 of 2 sampling events, and total zinc exceedances in 3 of 4 samples.	Delist <u>cadmium, copper, pH, and zinc</u> . TMDLs for these parameters were approved by EPA in 2003. Place on the Planning List for TMDL follow-up monitoring.	
Alum Gulch 31E28'20"/110E43'51" - 31E29'17"/110E44'25" 1 mile AZ15050301-561B	A&Ww Not attaining FC Not attaining FBC Not attaining AgL Not attaining Category 4A -- Not attaining	On the Planning List due to: 1. <u>Missing core parameters</u> : <i>Escherichia coli</i> , total metals (lead and mercury), and turbidity/SSC. 2. TMDL follow-up monitoring for <u>cadmium, copper, pH, and zinc</u> . Total cadmium exceedances in 4 of 6 samples, acute and chronic cadmium exceedances in 5 of 5 sampling events, acute and chronic copper exceedances in 5 of 5 sampling events, total copper exceedances in 6 of 6 samples, low pH in 6 of 6 samples, acute and chronic zinc exceedances in 5 of 5 sampling events, and total zinc exceedances in 4 of 6 samples.	Delist <u>cadmium, copper, pH, and zinc</u> . TMDLs for these parameters were approved by EPA in 2003. Place on the Planning List for TMDL follow-up monitoring.	
Chimenea Creek headwaters - Rincon Creek 8 miles AZ15050302-140	A&Ww Inconclusive FC Inconclusive FBC Inconclusive Category 3 -- Inconclusive (not assessed)	On the Planning List due to insufficient monitoring data to assess (2 samples).		
Cienega Creek headwaters - Gardner Canyon 16 miles AZ15050302-006A Unique Water	A&Ww Attaining FC Attaining FBC Impaired AgL Attaining Category 5 -- Impaired		Add <i>Escherichia coli</i> to the 303(d) List due to exceedances in 2 of 6 sampling events (occurred in 2001).	
Cienega Creek Gardner Canyon - USGS gage station (Pantano Wash) 11 miles AZ15050302-006B	A&Ww Attaining FC Attaining FBC Attaining AgL Attaining Category 1 -- Attaining All Uses			
Cox Gulch headwaters - 3R Canyon 2 miles AZ15050301-560	A&Ww Not attaining FC Inconclusive FBC Not attaining Category 4A -- Not attaining	On the Planning List due to: 1. <u>Missing core parameters</u> : <i>Escherichia coli</i> , dissolved oxygen, total mercury, and turbidity/SSC. 2. TMDL follow-up monitoring for <u>cadmium, copper, pH, and zinc</u> . Acute and chronic cadmium exceedances in 2 of 2 sampling events, acute and chronic copper exceedances in 2 of 2 sampling events, total copper exceedances in 3 of 3 samples, low pH in 1 of 1 sample, and acute and chronic zinc exceedances in 2 of 2 sampling events.		<u>Cadmium, copper, zinc and pH</u> TMDLs for Three R Canyon included loadings for Cox Gulch (a tributary). These TMDLs were approved by EPA in 2003. Add to the Planning List for TMDL follow-up monitoring.

TABLE 20. SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Cox Gulch, <u>unnamed tributary of headwaters - Cox Gulch</u> 1 mile AZ15050301-877	A&We Not attaining PBC Not attaining Category 4A -- Not attaining	On the Planning List due to: 1. Insufficient monitoring data to assess (1 sample). 2. TMDL follow-up monitoring for <u>cadmium, copper, pH, and zinc</u> . Total and acute copper and acute zinc exceedances in 1 of 1 sampling event.		Samples were collected on this reach in support of the Three R Canyon TMDLs. <u>Cadmium, copper, zinc, and pH</u> loadings from this reach were addressed in the Three R Canyon TMDLs approved by EPA in 2003. Therefore, assessed as "not attaining" and add to the Planning List for TMDL follow-up monitoring.
Harshaw Creek headwaters - Sonoita Creek 14 miles AZ15050301-025	A&We Not attaining PBC Not attaining AgL Not attaining Category 4A -- Not attaining	On the Planning List due to: 1. <u>Missing core parameter</u> : total lead. 2. TMDL follow-up monitoring for <u>copper and pH</u> . Acute and chronic copper exceedance and low pH in 1 of 4 sampling events.	Delist zinc. Designated uses were changed from A&Ww to A&We, resulting in a change in applicable standards. No exceedances of the new standard.	<u>Copper and pH</u> TMDLs were approved by EPA in 2003. Although copper and pH were delisted in 2002 due to requirements in the Impaired Waters Identification Rule, a draft TMDL had already been completed. Place copper and pH on the Planning List for TMDL follow up monitoring.
Harshaw Creek, <u>unnamed tributary of (Endless Chain Mine tributary) headwaters - Harshaw Creek</u> 1.5 miles AZ15050301-888	A&We Not attaining PBC Not attaining Category 4A -- Not attaining	On the Planning List for TMDL follow-up monitoring for <u>copper and pH</u> . Low pH in 1 of 3 samples.		Samples were collected on this reach in support of the Harshaw Creek TMDLs. <u>Copper and pH</u> loadings from this tributary were addressed in the Harshaw Creek TMDLs approved by EPA in 2003. Therefore, assessed as "not attaining" and add to the Planning List for TMDL follow-up monitoring.
Humbolt Canyon headwaters - Alum Gulch 2 miles AZ15050301-340	A&Ww Not attaining FC Inconclusive FBC Not attaining Category 4A -- Not attaining	On the Planning List due to: 1. <u>Missing core parameters: Escherichia coli</u> , total mercury, and turbidity/SSC. 2. TMDL follow-up monitoring for <u>cadmium, copper, zinc and pH</u> . Acute and chronic cadmium, acute and chronic copper, acute and chronic zinc exceedances, and low pH in 1 of 1 sampling event.		Samples were collected on this reach in support of the Alum Gulch TMDLs. <u>Cadmium, copper, zinc and pH</u> loadings from this tributary were addressed in the Alum Gulch TMDLs approved by EPA in 2003. Therefore, assessed as "not attaining" and add to the Planning List for TMDL follow-up monitoring.
Loma Verde Wash headwaters - unnamed trib to Tanque Verde Wash 4 miles AZ15050302-268	A&We Inconclusive PBC Inconclusive Category 3 -- Inconclusive (not assessed)	On the Planning List due to insufficient monitoring data to assess (2 samples).		
Madera Canyon Creek headwaters - tributary at 31°E43'42"/110°E52'50" 2 miles AZ15050301-322A	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive (not assessed)	On the Planning List due to insufficient monitoring data to assess (1 sample).		
Madrona Creek headwaters - Rincon Creek 7 miles AZ15050302-138	A&Ww Inconclusive FC Inconclusive FBC Inconclusive Category 3 -- Inconclusive (not assessed)	On the Planning List due to insufficient monitoring data to assess (1 sample).		

TABLE 20. SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Nogales & East Nogales Washes Mexico border - Potrero Creek 6 miles AZ15050301-011	A&Ww Impaired PBC Impaired Category 5 -- Impaired	On the Planning List due to: 1. <u>Chronic ammonia</u> exceedances (4 of 18 sampling events, 22% exceed). 2. <u>Chronic copper</u> exceedances (2 of 18 sampling events, 11% exceed). 3. Former <u>turbidity</u> standard exceedances (5 of 18 samples). Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed.	On the 303(d) List (since 1996) due to <u>chlorine</u> exceedances (12 of 12 sampling events). Add <u>Escherichia coli</u> exceedances (9 of 14 sampling events). Delist fecal coliform. Standard repealed in 2002 and replaced with the <u>Escherichia coli</u> standard. Delist turbidity. Standard repealed in 2002. Assessed turbidity as "not attaining" and placed in category 4D. Although current turbidity data are inconclusive (5 of 18 samples), reach will remain "not attaining" until sufficient turbidity or suspended sediment concentration (new sediment standard) data are collected to make an assessment of "attaining" or "impaired."	Bacterial contamination is due to insufficient wastewater infrastructure in Mexico. The chlorine tablets put in the stream to mitigate high bacterial contamination are toxic to aquatic life. EPA may use exceedances of the former turbidity standard as an indicator of narrative standards violations and place this reach on the 2004 303(d) List due to turbidity.
Pena Blanca Canyon Creek Mexico border - Pena Blanca Lake 5 miles AZ15050301-808	A&Ww Inconclusive FBC Inconclusive FC Inconclusive Category 3 -- Inconclusive (not assessed)	On Planning List (no current monitoring data). Added in 2002 due to insufficient monitoring data.		
Potrero Creek Interstate 19 - Santa Cruz River 5 miles AZ15050301-500B	A&Ww Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List due to: 1. <u>Acute and chronic chlorine</u> exceedance (1 of 1 sampling event). 2. <u>Chronic copper</u> exceedance (1 of 2 sampling events). 3. <u>Missing core parameters</u> : dissolved metals (cadmium, copper, and zinc) and total metals (mercury, lead, and copper).	Delist fecal coliform. Arizona replaced its fecal coliform standards with <u>Escherichia coli</u> standards. Reach is meeting the <u>Escherichia coli</u> standards.	
Redrock Canyon Creek headwaters - Harshaw Creek 13 miles AZ15050301-576	A&Ww Attaining FC Attaining FBC Attaining Category 1 -- Attaining All Uses			
Sabino Canyon Creek tributary at 32°23'28"/110°47'00" - Tanque Verde Wash 20 miles AZ15050302-014B (Reach was split into coldwater and warmwater segments since last assessment. No current data in 014A.)	A&Wc Inconclusive FC Attaining FBC Attaining DWS Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : dissolved metals (cadmium, copper, and zinc).		
Santa Cruz River headwaters - Mexico border 14 miles AZ15050301-268	A&Ww Attaining FC Attaining FBC Attaining AgL Attaining Category 1 -- Attaining All Uses			

TABLE 20. SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Santa Cruz River Mexico border - Nogales WWTP 17 miles AZ15050301-010	A&Ww Attaining FC Attaining FBC Impaired DWS Attaining Agl Attaining AgL Attaining Category 5 -- Impaired	Remove turbidity from the Planning List. Turbidity is supporting uses (2 of 22 samples exceed).	On the 303(d) List since 2002 due to <u>Escherichia coli</u> exceedances (2 of 20 sampling events). <u>Delist fecal coliform</u> as the standard has been replaced by <u>Escherichia coli</u> standards.	
Santa Cruz River Nogales WWTP - Josephine Canyon 9 miles AZ15050301-009	A&Wedw Inconclusive PBC Attaining AgL Inconclusive Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : dissolved metals (cadmium, copper, and zinc) and total metals (copper and lead).	<u>Delist fecal coliform</u> as the standard has been replaced by <u>Escherichia coli</u> standards. No <u>Escherichia coli</u> exceedances occurred in 15 samples taken in 2000 - 2001.	
Santa Cruz River Josephine Canyon - Tubac Bridge 5 miles AZ15050301-008A	A&Wedw Not attaining PBC Attaining AgL Inconclusive Category 4D - Not Attaining	On the Planning List due to: 1. <u>Chlorine</u> exceedance (1 of 1 sampling event). 2. Former <u>turbidity</u> standard exceedances (8 of 20 samples). Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed. 3. <u>Missing core parameters</u> : dissolved metals (cadmium, copper, and zinc) and total metals (copper and lead).	<u>Delist fecal coliform</u> as the standard has been replaced by <u>Escherichia coli</u> standards. No <u>Escherichia coli</u> exceedances occurred in 16 samples taken in 2000 - 2001. <u>Delist turbidity</u> - standard repealed in 2002. Assessed turbidity as "not attaining" and placed in category 4D. Turbidity exceedances in 8 of 20 samples indicate impairment based on the former standard. Reach will remain "not attaining" until sufficient turbidity or suspended sediment concentration (new sediment standard) data are collected to make an assessment of "attaining" or "impaired."	EPA may use exceedances of the former turbidity standard as an indicator of narrative standards violations and place this reach on the 2004 303(d) List due to turbidity.
Santa Cruz River Tubac Bridge - Sopori Wash 9 miles AZ15050301-008B	A&We Inconclusive PBC Attaining AgL Inconclusive Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : dissolved metals (cadmium, copper, and zinc) and total metals (copper and lead).	<u>Delist fecal coliform</u> as the standard has been replaced by <u>Escherichia coli</u> standards. No <u>Escherichia coli</u> exceedances occurred in 17 samples taken in 2000 - 2001.	
Santa Cruz River Roger Rd. WWTP outfall - Rillito Creek 3 miles AZ15050301-003B	A&Wedw Inconclusive PBC Inconclusive Category 3 -- Inconclusive	On the Planning List due to <u>missing core parameters</u> : <u>Escherichia coli</u> , pH, and dissolved metals (cadmium, copper, and zinc).		
Santa Cruz River Canada del Oro - HUC boundary 15050303 9 miles AZ15050301-001	A&Wedw Inconclusive PBC Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>acute and chronic chlorine</u> exceedance (1 of 2 sampling events).		
Santa Cruz River HUC boundary 15050303 - Baumgartner Rd. 25 miles AZ15050303-005A	A&Wedw Inconclusive PBC Inconclusive Category 3 -- Inconclusive	On the Planning List due to <u>missing core parameters</u> : <u>Escherichia coli</u> , pH, and dissolved metals (cadmium, copper, and zinc).		
Sonoita Creek headwaters - Patagonia WWTP 14 miles AZ15050301-013A	A&We Inconclusive PBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive (not assessed)	On Planning List (no current monitoring data). Added in 2002 due to missing core parameters.		

TABLE 20. SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Sonoita Creek 750 feet below WWTP - Santa Cruz River 19 miles AZ15050301-013C	A&Ww Impaired FC Attaining FBC Attaining AgL Attaining AgL Attaining Category 5 – Impaired	On the Planning List due to <u>chronic copper</u> exceedance (1 of 4 sampling events).	Add zinc to the 303(d) List due to acute zinc exceedances in 2 of 4 sampling events.	
Sycamore Canyon Creek headwaters - Mexico border 10 miles AZ15080200-002	A&Ww Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 – Inconclusive (not assessed)	On the Planning List due to insufficient monitoring data to assess (only 1 sample).		
Three R Canyon headwaters - 31°E28'35"/110°E46'19" 1 mile AZ15050301-558A (This stream has been resegmented since the last assessment)	A&We Not attaining PBC Not attaining AgL Not attaining Category 4A – Not attaining	On the Planning List due to: 1. Insufficient monitoring events to assess (only 2 sampling events). 2. TMDL follow-up monitoring for <u>cadmium, copper, zinc, and pH</u> . Acute and chronic copper exceedance (1 of 1 sampling event) and low pH (1 of 1 sample).	Delist <u>cadmium, copper, zinc, and pH</u> . TMDLs for these parameters were approved by EPA in 2003. Placed on the Planning List for TMDL follow-up monitoring.	
Three R Canyon 31°E28'35"/110°E46'19"- 31°E28'27"/110°E47'12" 1 mile AZ15050301-558B (This stream has been resegmented since the last assessment)	A&Ww Not attaining FC Inconclusive FBC Not attaining AgL Not attaining Category 4A – Not attaining	On the Planning List due to: 1. <u>Missing core parameters</u> : <i>Escherichia coli</i> , total metals (lead and mercury), and turbidity/SSC. 2. TMDL follow-up monitoring for <u>cadmium, copper, zinc, and pH</u> . Cadmium, copper, and zinc exceedances (5 of 5 sampling events for each), and low pH in 5 of 5 samples.	Delist <u>cadmium, copper, zinc, and pH</u> . TMDLs for these parameters were approved by EPA in 2003. Placed on the Planning List for TMDL follow-up monitoring.	
Three R Canyon 31°E28'27"/110°E47'12" - Sonoita Creek 3 miles AZ15050301-558C (This stream has been resegmented since the last assessment)	A&We Not attaining PBC Not attaining AgL Not attaining Category 4A – Not attaining	On the Planning List due to: 1. <u>Missing core parameter</u> : total lead. 2. TMDL follow-up monitoring for <u>cadmium, copper, zinc, and pH</u> . Copper exceedances (2 of 2 sampling events), zinc exceedances (1 of 2 sampling events) and low pH in 2 of 2 samples.	Delist <u>cadmium, copper, zinc, and pH</u> . TMDLs for these parameters were approved by EPA in 2003. Placed on the Planning List for TMDL follow up monitoring.	
Three R Canyon, <u>unnamed tributary of</u> headwaters - Three R Canyon 2 miles AZ15050301-889	A&We Not attaining PBC Not attaining Category 4A – Not attaining	On the Planning List due to: 1. TMDL follow-up monitoring for <u>cadmium, copper, zinc, and pH</u> . Copper exceedance in 1 of 1 sampling event and low pH in 1 of 1 sample. 2. Insufficient monitoring data.		Samples were collected on this reach in support of the Three R Canyon TMDLs. <u>Cadmium, copper, zinc, and pH</u> loadings from this tributary were addressed in the Three R Canyon TMDLs approved by EPA in 2003. Therefore, assessed as "not attaining" and add to the Planning List for TMDL follow-up monitoring.

TABLE 20. SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- LAKE ASSESSMENTS				
Arivaca Lake 118 acres AZL15050304-0080	A&Ww Inconclusive FC Not attaining FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 4A -- Not Attaining Trophic status -- Hypereutrophic	On the Planning List due to: 1. <u>Dissolved oxygen</u> exceedance (1 of 7 samples). 2. <u>pH</u> exceedance (1 of 7 samples). 3. <u>Selenium</u> exceedance (1 of 7 sampling events). 4. <u>Fish kill</u> in 1999 related to algal blooms, which may be evidence of a narrative standard violation. 5. <u>Missing core parameters</u> : <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc). 6. TMDL follow-up monitoring for <u>mercury concentration</u> in fish tissue.		TMDL for mercury in fish tissue was approved by EPA in 1999. Added to the Planning List in 2002 for TMDL follow-up monitoring.
Kennedy Lake 10 acres AZL15050301-0720	A&Ww Inconclusive FC Attaining PBC Inconclusive Category 2 -- Attaining Some Uses Trophic status -- Eutrophic	On the Planning List due to <u>missing core parameters</u> : <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).		
Lakeside Lake 15 acres AZL15050302-0760	A&Ww Impaired FC Attaining PBC Inconclusive Category 5 -- Impaired Trophic status -- Hypereutrophic	On the Planning List due to: 1. <u>Chronic ammonia</u> exceedances (2 of 11 sampling events, 18% exceed). 2. Former <u>turbidity</u> standard exceedances (21 of 34 samples). Investigation into the causes and sources of turbidity will be scheduled during the next monitoring cycle for this watershed. 3. <u>Missing core parameters</u> : <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).	Add <u>dissolved oxygen</u> to the 303(d) List (low dissolved oxygen in 16 of 55 samples).	City installed an aeration system in the lake in June 2002, but exceedances are still occurring. A draft nutrient TMDL, providing for dissolved oxygen and pH, was completed in 2002, but has <u>not</u> been approved by EPA. Assessed turbidity as "not attaining" and placed in category 4D. Turbidity exceedances in 21 of 34 samples indicate impairment based on the former standard. Placed on the Planning List for follow-up monitoring. EPA may use exceedances of the former turbidity standard as an indicator of narrative standards violations and place this reach on the 2004 303(d) List due to turbidity.
Parker Canyon Lake 129 acres AZL15050301-1040	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Attaining AgL Attaining Category 2 -- Attaining Some Uses Trophic status -- Mesotrophic	On the Planning List due to 1. <u>Missing core parameters</u> : <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc). 2. <u>Fish consumption advisory</u> issued in 2002 may be evident of a narrative toxic standards violation.		For the 2002 303(d) List, EPA placed waters with a <u>fish consumption advisory</u> on the 303(d) List, as the advisory was considered adequate evidence of a narrative toxic standards violation. The advisory for Parker Lake was issued after the last 303(d) List. ADEQ anticipates that EPA will take the same action and place this water on the 2004 303(d) List.
Patagonia Lake 230 acres AZL15050301-1050	A&Wc Inconclusive FC Attaining FBC Inconclusive DWS Attaining Agl Attaining AgL Attaining Category 2 -- Attaining Some Uses Trophic status -- Eutrophic	On the planning List due to <u>missing core parameters</u> : <i>Escherichia coli</i> and turbidity. <u>Remove dissolved oxygen</u> from the Planning List. No exceedances in 6 samples indicates support of designated uses.		

TABLE 20. SANTA CRUZ-RIO MAGDALENA-RIO SONOYTA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Pena Blanca Lake 51 acres AZL15050301-1070	A&Wc Inconclusive FC Not attaining FBC Inconclusive Agl Attaining AgL Inconclusive Category 4A — Not attaining Trophic status -- Eutrophic	On the Planning List due to: 1. <u>Low pH</u> (1 of 6 samples). 2. <u>Chronic selenium</u> exceedance (1 of 6 sampling events). 3. Former <u>turbidity</u> standard exceedance (1 of 3 samples). Causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed. 4. <u>Missing core parameters</u> : <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc). 5. TMDL follow-up monitoring for <u>mercury concentration in fish tissue</u> .		TMDL for mercury in fish tissue was approved by EPA in 1999. Added to the Planning List in 2002 for TMDL follow-up monitoring.
Rose Canyon Lake 7 acres AZL15050302-1260	A&Wc Inconclusive FC Attaining FBC Inconclusive Agl Inconclusive Category 2 – Attaining Some Uses Trophic status – Eutrophic	On the Planning List due to: 1. <u>Low pH</u> (2 of 3 samples) and <u>high pH</u> (1 of 3 samples). 2. Former <u>turbidity</u> standard exceedance (1 of 4 samples). Causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed. 3. <u>Missing core parameters</u> : <i>Escherichia coli</i> and dissolved metals (cadmium, copper, zinc).		